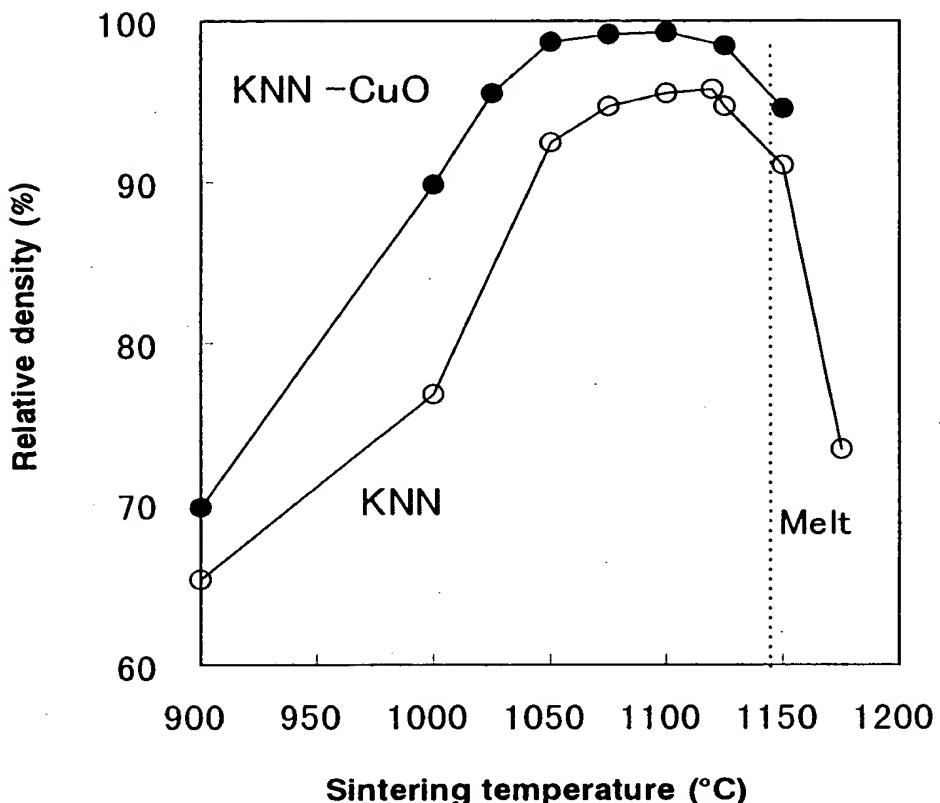


FIG.1

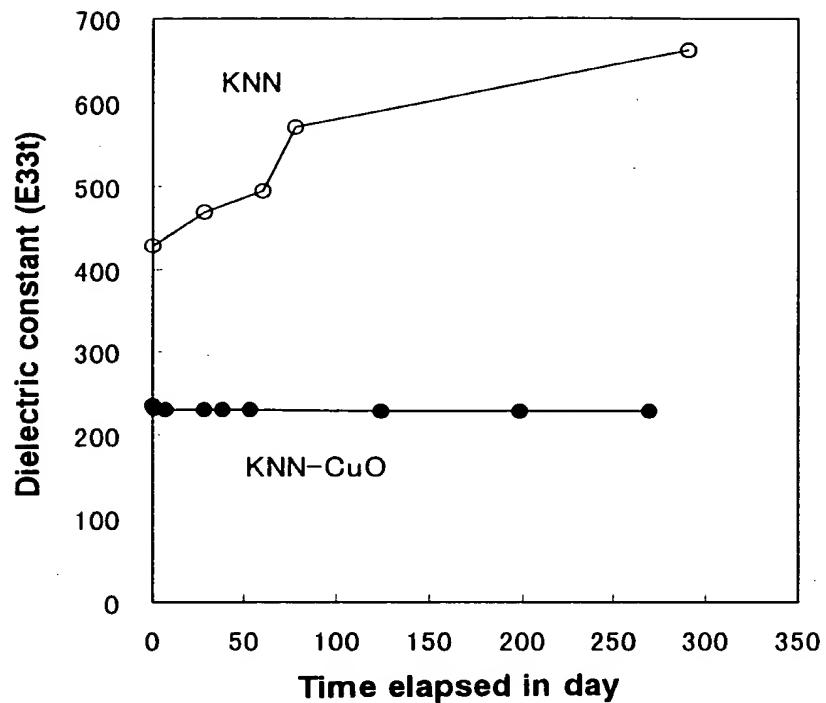
6387295



KNN : $K_{0.5}Na_{0.5}NbO_3$

KNN - CuO: $K_{0.5}Na_{0.5}NbO_3$

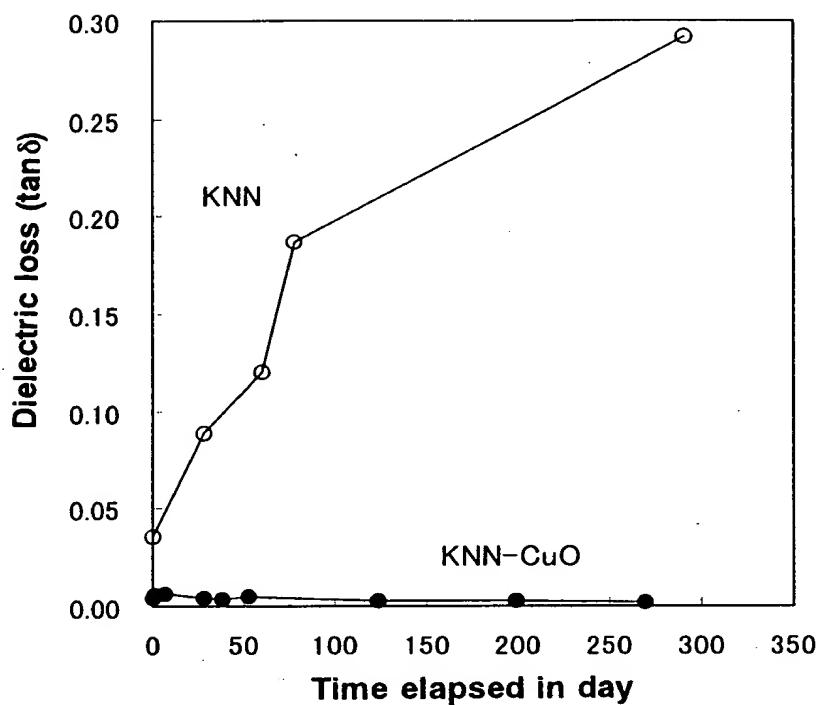
FIG.2



KNN : $K_{0.5}Na_{0.5}NbO_3$

KNN-CuO : $K_{0.5}Na_{0.5}NbO_3 + 1 \text{ mol\% CuO}$

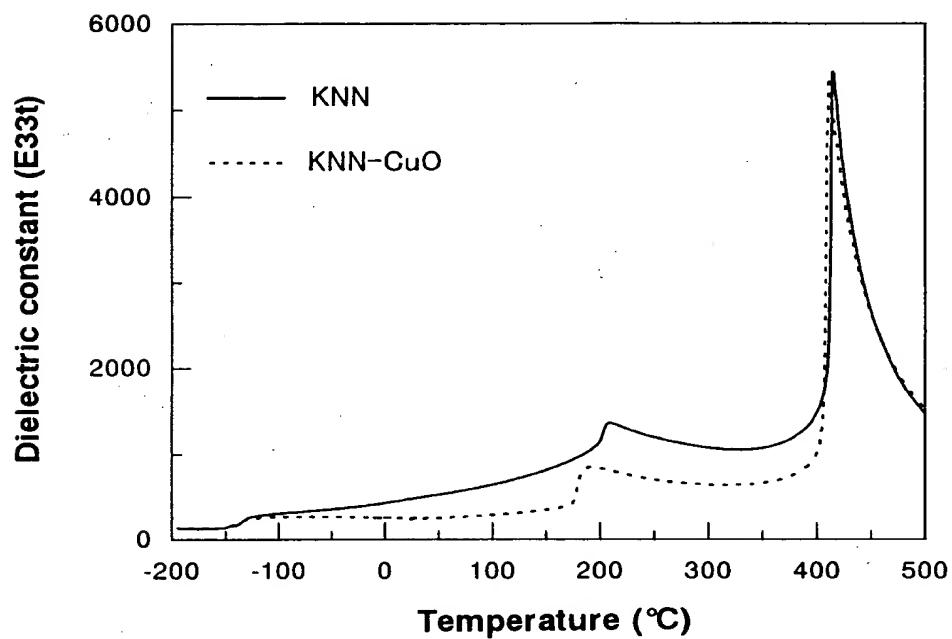
FIG.3



KNN : $K_{0.5}Na_{0.5}NbO_3$

KNN-CuO : $K_{0.5}Na_{0.5}NbO_3 + 1 \text{ mol\% CuO}$

FIG.4



KNN : $(K_{0.5}Na_{0.5})NbO_3$

KNN-CuO : $(K_{0.5}Na_{0.5})NbO_3 + 1\text{ mol\% CuO}$

FIG.5

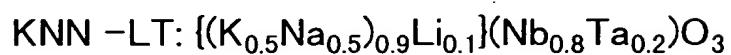
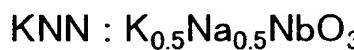
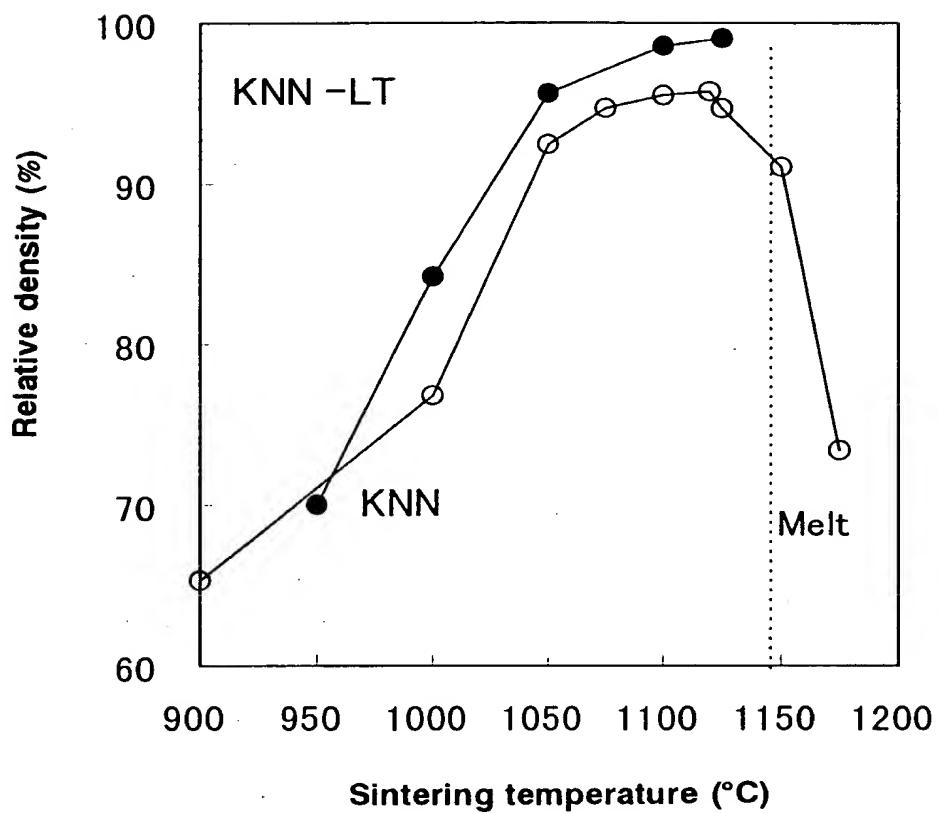
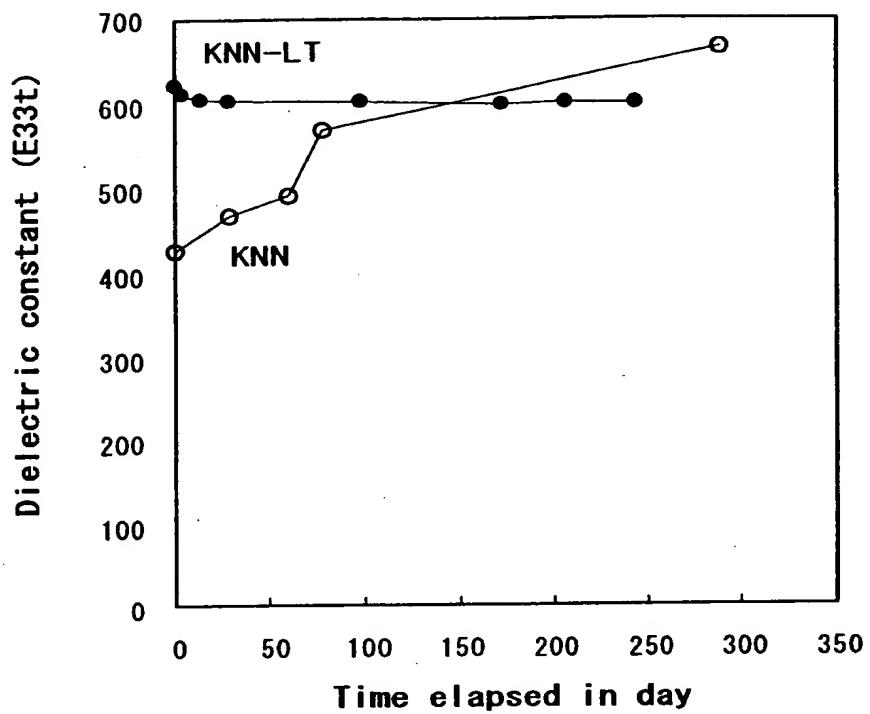


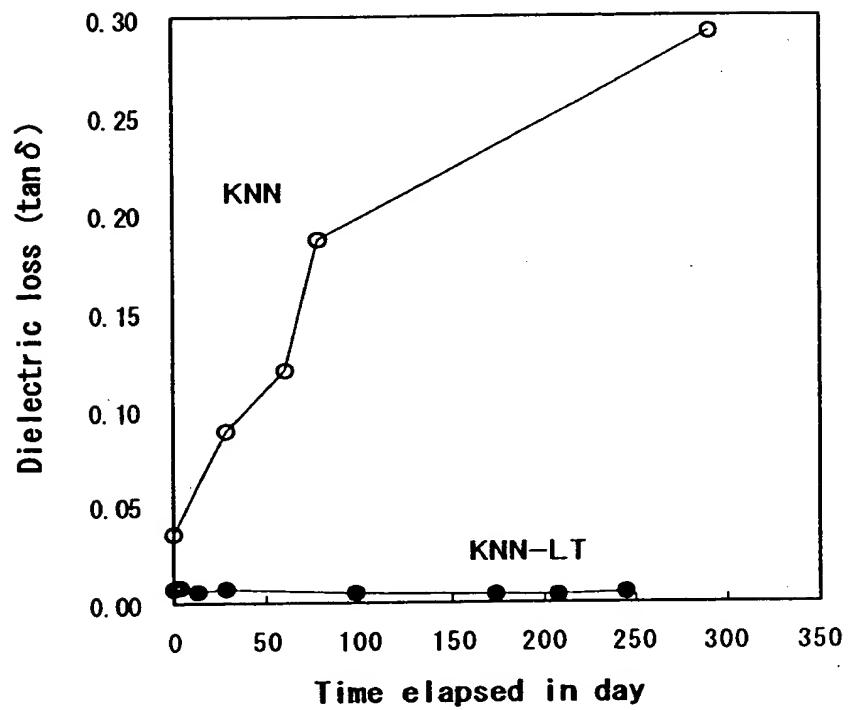
FIG. 6



KNN : $K_{0.5}Na_{0.5}NbO_3$

KNN-LT : $[(K_{0.5}Na_{0.5})_{0.9}Li_{0.1}](Nb_{0.8}Ta_{0.2})O_3$

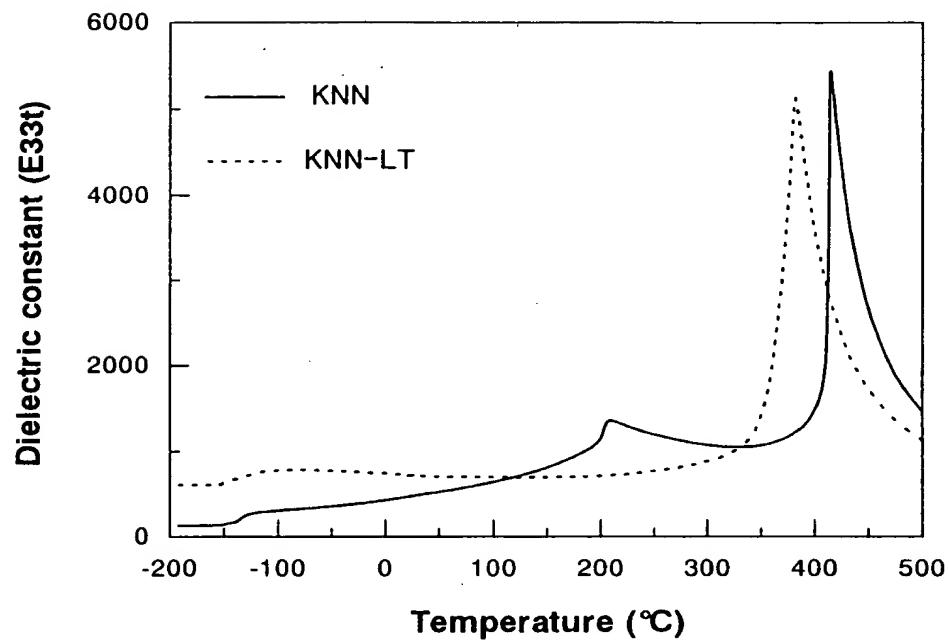
FIG. 7



KNN : $K_{0.5}Na_{0.5}NbO_3$

KNN-LT : $[(K_{0.5}Na_{0.5})_{0.9}Li_{0.1}]_x(Nb_{0.8}Ta_{0.2})O_3$

FIG. 8



KNN : $(K_{0.5}Na_{0.5})NbO_3$

KNN-LT : $\{(K_{0.5}Na_{0.5})_{0.9}Li_{0.1}\}(Nb_{0.8}Ta_{0.2})O_3$

FIG.9(a)

Electromechanical coupling factors (kp)

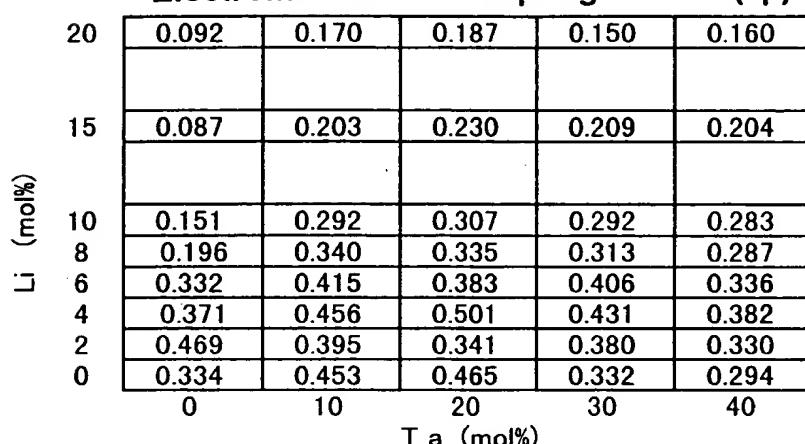


FIG.9(b)

Piezoelectric constant (d₃₁ pm/V)

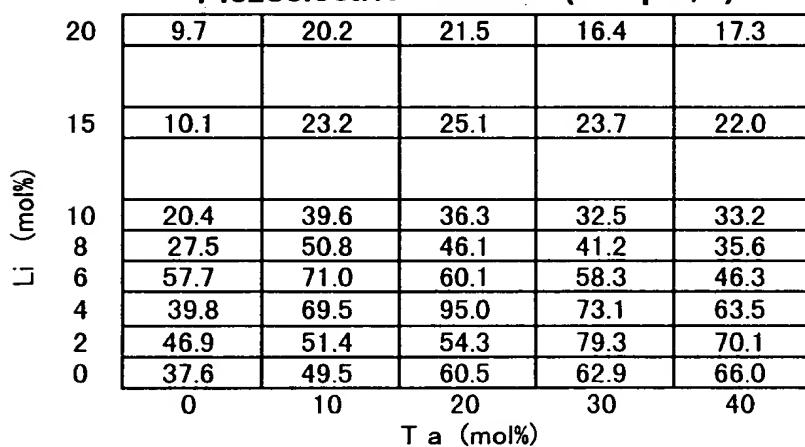


FIG.9(c)

Piezoelectric constant (g₃₁ 10³Vm/N)

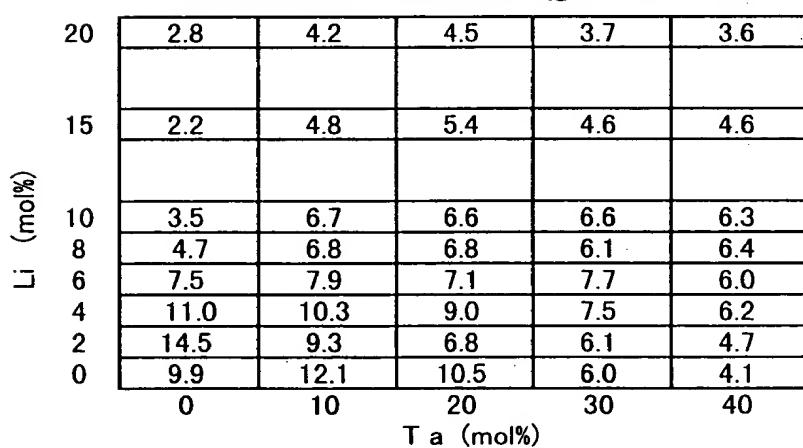


FIG.10(a)

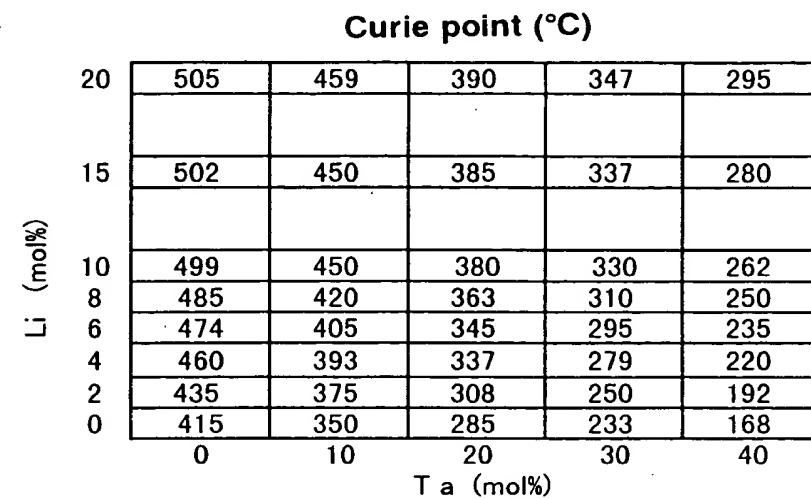


FIG.10(b)

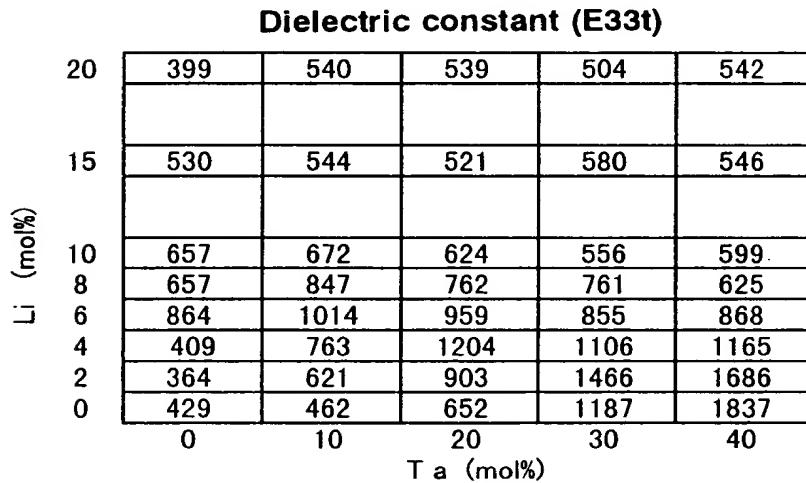


FIG.10(c)

